Stage v166:
Handheld Wireless System

OWNER'S MANUAL

SAMSON®

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v2.1
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Important Safety Information

ATTENTION
RISQUE D'ÉLECTROCUTION !
NE PAS OUVRIR !

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of non-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying the appliance.

WARNING

TO PREVENT FIRE OR SHOCK HAZARD. DO NOT USE THIS PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE. TO PREVENT FIRE OR SHOCK HAZARD. DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE. TO PREVENT ELECTRICAL SHOCK, MATCH WIDE BLADE PLUG TO WIDE SLOT AND FULLY INSERT.

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES CLASS B. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MUST NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION. SUITABLE FOR HOME OR OFFICE USE.

If you want to dispose this product, do not mix it with general household waste. There is a separate collection system for used electronic products in accordance with legislation that requires proper treatment, recovery and recycling.

Private household in the 25 member states of the EU, in Switzerland and Norway may return their used electronic products free of charge to designated collection facilities or to a retailer (if you purchase a similar new one).

For Countries not mentioned above, please contact your local authorities for a correct method of disposal.

By doing so you will ensure that your disposed product undergoes the necessary treatment, recovery and recycling and thus prevent potential negative effects on the environment and human health.

Important Safety Information

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at the plugs, convenience receptacles, and at the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13. Unplug the apparatus during lightening, sort or when unused for long periods of time. Refer all servicing to qualified personnel. Service is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
14. This appliance shall not be exposed to dripping or splashing water and that no object filled with liquid such as vases shall be placed on the apparatus.
15. Caution-to prevent electrical shock, match wide blade plug wide slot fully insert.
16. Please keep a good ventilation environment around the entire unit.
17. The direct plug-in adapter is used as disconnect device, the disconnect device shall remain readily operable.
18. Batteries(battery pack or batteries installed) shall not be exposed to excessive heat such as sunshine, fire or the like.

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Introduction

Congratulations on purchasing the Samson Stage v166 Wireless Microphone System! The Stage v166 system is the perfect solution for any application requiring high quality, wireless microphones in an easy to use, compact package. The system features the SR166 receiver and HT6 handheld microphone transmitter.

With the Stage v166 system, you'll have great sound quality with clear reception, and the ability to walk freely around your venue. For any live sound application (karaoke, schools, conferences, houses of worship, etc.) the Stage v166 is the ideal tool for your wireless microphone needs. The Stage v166 always provides outstanding performance and reliability.

Although this product is designed for intuitive operation, we suggest you take some time to go through these pages to learn how we've implemented a number of unique features, and to get step-by-step instructions for setting up your system. If your Stage v166 was purchased in the United States, you'll also find a warranty card enclosed—please don't forget to fill it out and mail it in so that you can receive online technical support, and so that we can send you updated information about this and other Samson products. Also, be sure to check out our website (www.samsontech.com) for complete information about our full product line.

We recommend that you record your serial number in the space provided below, for future reference.

Serial number:_____

Date of purchase:_____

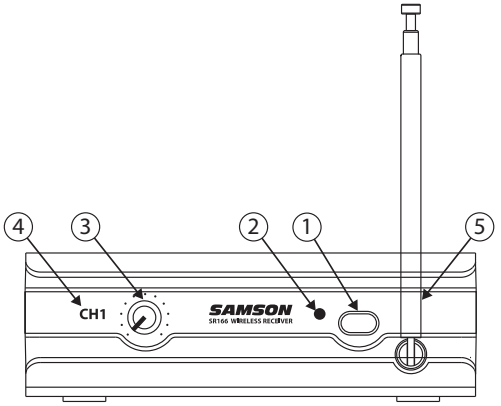
Should your unit ever require servicing, a Return Authorization (RA) number must be obtained before shipping your unit to Samson. Without this number, the unit will not be accepted. Please call Samson at 1-800-3SAMSON (1-800-372-6766) for an RA number prior to shipping your unit. Please retain the original packing materials and, if possible, return the unit in the original carton. If you purchased your Samson product outside the United States, please contact your local distributor for warranty information and service.

Features

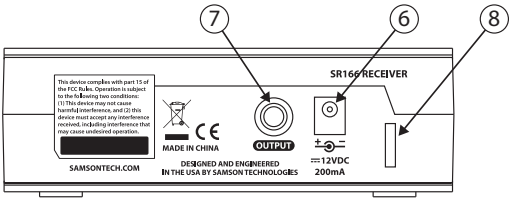
- Professional, handheld wireless system.
- Easy setup and operation.
- Crystal-controlled, Superheterodyne circuitry for clear and reliable reception.
- ¼″ output
- Up to 250′ of line-of-sight operating range.
- HT6 handheld microphone transmitter with mute switches
- Transmitter provides nine hours of battery life, using standard 9-volt batteries.

SR166 Receiver Controls and Features

1. **Power Switch -** Press to turn the receiver on or off.
2. **Power Indicator -** Lights red when the receiver is powered on.
3. **Volume Control -** Rotate to adjust the level of the audio signal output from receiver.
4. **RF Indicator -** Lights green when the HT6 transmitter is powered on, and there is an RF signal present and detected by the receiver.
5. **Antenna -** The antenna mountings allow full rotation for optimum placement. In normal operation, both antennas should be placed in a vertical position. The antennas can be folded inward for convenience when transporting the SR166.



6. **DC Input -** Connect the supplied 12-volt, 200 mA power adapter here.
   WARNING: The substitution of any other kind of power adapter can cause severe damage to the SR166 and will void your warranty.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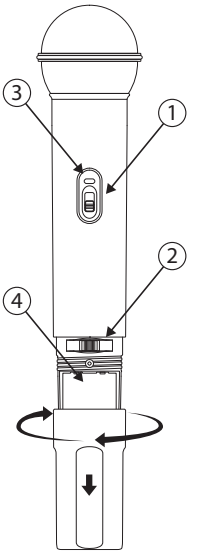
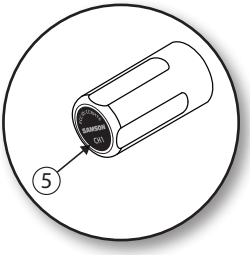
SR166 RECEIVER
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
MADE IN CHINA
OUTPUT
12VDC
200mA
SAMSONTECH.COM
DESIGNED AND ENGINEERED IN THE USA BY SAMSON TECHNOLOGIES

7. **Output -** Use this unbalanced, ¼" jack to connect the SR166 receiver to the line level input of a mixer, amplifier, or other audio equipment.
8. **Adaptor Strain Relief -** Loop the included adaptor's cord through the strain relief to prevent the plug from accidentally detaching from the receiver.

HT6 Transmitter Controls and Features



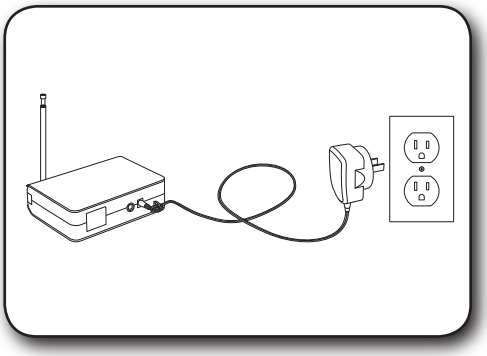
1. **Audio ON/OFF Switch -** When set to the ON position, audio signal is transmitted. When set to the OFF position, the audio signal is muted. Note that moving this switch to the OFF position does not turn off the transmitter power—it is simply a way to temporarily mute the transmission of audio signal. When not in use for extended periods, the transmitter power should be turned off by using the power ON/OFF switch.
2. **Power ON/OFF Switch -** Use this switch to turn the HT6 on or off (to conserve battery power, be sure to leave it off when not in use). Be sure to mute the audio signal at your external mixer or amplifier before turning transmitter power on or off, or an audible pop may result.
3. **Power Indicator -** LED lights green when the transmitter is powered on.
4. **Battery Compartment -** Insert a standard 9-volt alkaline battery here. Be sure to observe the plus and minus polarity markings when installing the battery. We recommend the Duracell MN 1604 type battery for use with this device. Although rechargeable Ni-Cad batteries can be used, they do not supply adequate current for more than four hours.
   WARNING: Do not insert the battery backwards; doing so can cause severe damage to the HT6 and will void your warranty.
5. **Channel Marking -** Printed number corresponding to the appropriate channel on the SR166 receiver.



Quick Start Guide

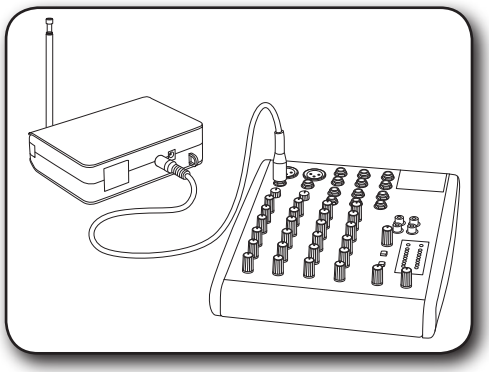
Follow these basic procedures for setting up and using your Stage v166 Series Wireless System.

1. Connect the SR166 receiver power adaptor to the rear panel DC input, and then to an electrical outlet.

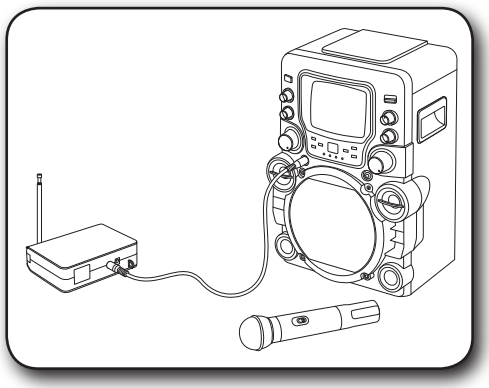


2. Connect the receiver's appropriate ¼" output to the input of a mixer, stereo, karaoke machine, or any other line level input (see below).

Use the included ¼" to ¼" cable to connect the SR166 receiver to a mixer.

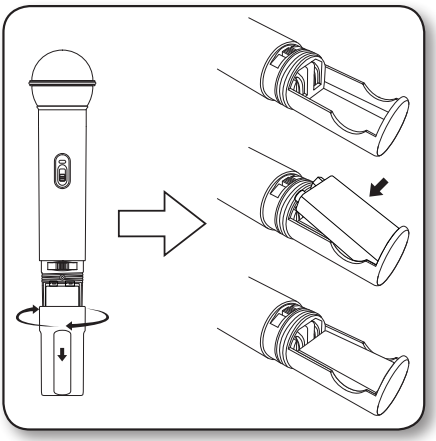


Use the included ¼" to ¼" cable to connect the SR166 receiver to karaoke machine.

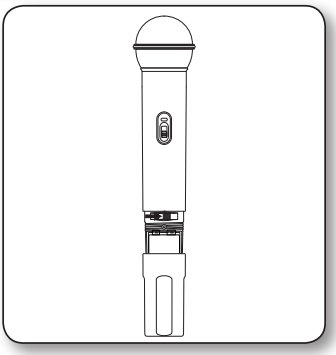


Quick Start Guide

3. While holding the upper section of the HT6 transmitter, rotate the bottom section and slide down to expose the battery compartment.
   Insert a standard 9-volt alkaline battery, being sure to follow the plus and minus polarity markings.

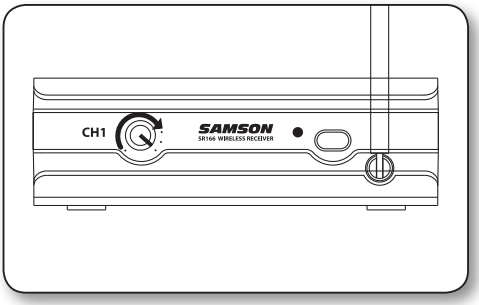


4. Turn on the HT6 transmitter by sliding the POWER switch to the right, and replace the bottom section.



5. Place the SR166 receiver where it will be used (the general rule of thumb is to maintain "line of sight" between the receiver and transmitters so that the person(s) using the transmitter can see the receiver). Turn on the power of the SR166 receiver.

6. Turn on the connected amplifier and/or mixer, but keep its volume all the way down. Next, make sure that your transmitter is un-muted by setting its Audio switch to ON. Then, set the Volume Control knob on the SR166 fully clockwise; this is unity gain.
   Speak or sing into the mic at a normal performance level while slowly raising the volume of your amplifier/mixer until the desired level is reached.



Specifications

OVERALL SYSTEM SPECIFICATIONS

Operating Frequency	VHF 173.80 MHz to 213.20 MHz
Number of Channels	Fixed channel
Frequency Stability	±0.005%
Modulation Mode	FM
Maximum Deviation	±15 kHz
Operating Range	250′ (line of sight)
Operating Temperature Range	40° F (4° C) to 110° F (43° C)
Frequency Response	80 Hz to 15 kHz

SR166 RECEIVER SPECIFICATIONS

Image Rejection	30 dB
Dynamic range	95.5 dB
Maximum Output	900mV
Sensitivity	10 dBµV for 48 dB S/N
Output Connectors	1/4″ TS (“mono”) phone jack
Audio Output Level	-10dB unbalanced (1/4″ phone connector)
Power Supply	100-240V AC (50/60 Hz) to 12V DC 200mA

HT6 HANDHELD TRANSMITTER SPECIFICATIONS

RF Power Output	10 mW
Microphone Element	H6 Dynamic unidirectional
Typical Battery Life (9-volt alkaline battery)	9-hours
Current Consumption	30 mA typical
Dimensions	Ø2.1″ x 9.3″
	Ø52.6 mm x 235.5 mm
Net Weight	0.4 lbs
	0.18 kg

Troubleshooting

Issue	Solutions
No Audio	Turn on the HT6 transmitter using the Power ON/OFF switch.
	Ensure the HT6 transmitter's batteries are installed correctly.
	Check that the HT6 Audio ON/OFF switch is in the ON position.
	Confirm that the SR166 adaptor is correctly connected and plugged into an electrical outlet.
	Turn on the SR166 receiver.
	Make sure the SR166 output and audio input connections are securely connected.
	Ensure that the SR166 receiver and HT6 transmitters are in line of sight with one another.
	Check the receiver and audio input device level controls.
Distorted Audio	Check the receiver output level and audio input device level.
	Check the HT6's batteries and replace if low.
	Another transmitter may be broadcasting on the same channel. Turn off transmitter that may be causing interference.
Audio Dropout	The transmitter may be too far away from the receiver. Move closer to the receiver, or reposition the antennas.
	Remove any sources that may cause RF interference, such as cell phones, cordless phones, lighting equipment, computers, etc.
Transmitters and Receiver on Different Channels	Contact your Samson reseller or distributor for assistance.

FCC Rules and Regulations

Samson wireless receivers are certified under FCC Rules part 15 and transmitters are certified under FCC Rules part 74. Licensing of Samson equipment is the user's responsibility and licensability depends on the user's classification, application and frequency selected.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- **Reorient or relocate the receiving antenna.**
- **Increase the separation between the equipment and receiver.**
- **Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.**
- **Consult the dealer or an experienced Radio/TV technician for help.**

WARNING: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with RSS-210 of Industry & Science Canada. Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

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